

What is claimed is:

1. A device for protecting a fibre line against destruction by laser radiation, comprising a section of an optical fibre having a core with a constant diameter throughout the length of said section, and a cladding of said optical fibre section, said cladding having at least at one part of length $L \geq 10D$ of said optical fibre section a cross-section parameter d in the range $D < d \leq \min(4D, 40 \mu\text{m})$, where D is the mode field diameter.

2. The device according to claim 1, characterized in that said optical fibre cladding is made of silica based glass.

3. The device according to claim 1, characterized in that said optical fibre section is formed directly in the fibre line to be protected.

4. The device according to claim 1, characterized in that said optical fibre section is further included into the fibre line to be protected, e.g. by splicing or connecting by optical connectors.

5. The device according to claim 1, characterized in that said optical fibre section is cylindrical, with the core having a constant diameter throughout the length of said section, and the cladding diameter d of the optical fibre section at least at one part of length $L \geq 10D$ of said optical fibre section being in the range $D < d \leq \min(4D, 40 \mu\text{m})$, where D is the mode field diameter.

6. The device according to claim 5, characterized in that said optical fibre section is formed directly in the fibre line to be protected.

7. The device according to claim 1, characterized in that said optical fibre section is further included into the fibre line to be protected, e.g. by splicing or connecting by optical connectors.